



Environmental Fact Sheet

EPA, CALIFORNIA AIR RESOURCES BOARD, AND MANUFACTURERS OF HEAVY-DUTY ENGINES SIGN "STATEMENT OF PRINCIPLES"

The Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and the leading manufacturers of heavy-duty engines signed an historic agreement to reduce engine emissions, bringing the nation closer to the goal of clean, healthy air. In this "Statement of Principles," the signatories agree to pursue new standards that will cut oxides of nitrogen (NOx) emissions from new trucks and buses in half. This agreement is an example of the type of private/public and federal/state partnership approach to environmental regulation that EPA is pursuing.

BACKGROUND

Heavy-duty engines (HDEs), such as those used in trucks and buses, have long been recognized as an important part of the United States transportation and construction industries. Because of the growing reliance on these engines as well as their design characteristics, they have historically contributed a significant amount of NOx, hydrocarbons (HC), and particulate matter (PM) found in air pollution. The HDE industry, EPA, and CARB acknowledge the growing use of these engines and have jointly committed to work together to reduce emissions from HDEs to protect public health and the environment.

Evolution of the Statement of Principles

This historic agreement between the highway HDE manufacturers, EPA, and CARB strives to reduce engine emissions while ensuring regulatory stability and certainty for the industry. With this agreement, the HDE industry has formed a partnership with state and federal government to bring about cleaner air.

The Statement of Principles grew out of discussions between CARB, EPA, and the engine manufacturers following the proposal of the Federal Implementation Plan for California. EPA expects to publish an Advance Notice of Proposed Rulemaking (ANPRM) consistent with

the Statement of Principles by August 1995. EPA will seek input on the ANPRM from a wide range of interested groups and will outline a formal notice and comment period as part of the *Federal Register* Notice.

EPA, CARB, and the heavy-duty industry agreed to work together in a cooperative manner to establish tighter national NOx standards for highway HDEs. Results of these discussions are reflected in the Statement of Principles; the agreement's goals of tightening emission standards for this class of engines is supported by a broad base of state and environmental groups.

STATEMENT OF PRINCIPLES: HIGHLIGHTS

- The goal is to reduce NOx emissions from highway HDEs to levels approximating 2.0 grams emitted per brake horsepower-hour (g/bhp-hr) beginning in 2004. (This is half of the 1998 NOx standard.) Manufacturers will have the flexibility to choose between two options:
 - (a) a combined non-methane HC (NMHC) + NOx standard of 2.4 g/bhp-hr, OR
 - (b) a combined NMHC + NOx standard of 2.5 g/bhp-hr AND a NMHC cap of 0.5 g/bhp-hr.Signatories will work to achieve low emissions throughout the life of the engine.
- EPA agrees to review the technological feasibility of the standards in 1999 and may make limited adjustments to the level and timing of the standards if needed.
- California intends to harmonize certain California HDE standards with the federal standards to make compliance simpler and less burdensome for the engine manufacturers.
- The Signatories agree to evaluate the role of fuel in the technological feasibility of potential engine options. The Signatories recognize that fuel improvements may be essential in reaching low NOx levels and that it is important to work with the fuels industry to explore possible needed improvements.

Research Agreement

The Signatories agree to work together to develop a separate research agreement which aims to develop technologies that can reduce NOx and PM emissions to levels of 1.0 g/bhp-hr and 0.05 g/bhp-hr, or lower, respectively. This cooperative effort will involve many different stakeholders to explore technologies that can achieve very low emission levels while preserving attributes of current engines such as performance, reliability, durability, safety, and efficiency.

Nonroad Engines

Nonroad engines used for construction, recreational, and home activities also contribute significant NOx and PM emissions. Control of emissions from nonroad sources is very important for long-term air quality improvements. The Signatories intend to work with the nonroad engine industry to develop a similar Statement of Principles for nonroad engines by approximately October 1995.

Environmental Benefits

More stringent emission standards for highway HDEs will provide substantial benefits for public health and the environment. The Statement of Principles sets out the goal of cutting the NOx standard in half while retaining the PM standard. The goals set for the research agreement would reduce NOx emissions by 75 percent and reduce PM by 50 percent from their 1998 levels. It is expected that the HDE contribution to smog and acid rain will be reduced by this agreement.

FOR MORE INFORMATION

The Office of Mobile Sources is the national center for policy on air pollution from highway and nonroad motor vehicles and equipment. For additional information, please write to:

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